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10/584,739	06/26/2006	Yoshiaki Hashimoto	KUZ0032US.NP	5791
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EXAMINER ORWIG, KEVIN S				
ART UNIT 1611		PAPER NUMBER		
NOTIFICATION DATE 05/21/2009		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

poreilly@licataandtyrrell.com

# Office Action Summary

**Application No.**

10/584,739

**Applicant(s)**

HASHIMOTO ET AL.

**Examiner**

Kevin S. Orwig

**Art Unit**

1611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

The amendments and arguments filed Mar. 13, 2009 are acknowledged and have been fully considered. Claims 1-11 are amended and are currently pending.

***OBJECTIONS/REJECTIONS WITHDRAWN***

The objection to claim 1 is withdrawn upon further consideration.

The rejections of claims 1-11 under 35 U.S.C. 112, 2<sup>nd</sup> paragraph are withdrawn, in light of the claim amendments.

The rejection of claims 1-6, 8, 10, and 11 under 35 U.S.C. 102(b) over TSURUDA is withdrawn in light of the claim amendments.

The rejection of claims 1-6 and 8-11 under 35 U.S.C. 103(a) over TSURUDA is withdrawn in light of the claim amendments.

The double patenting rejections of record have been withdrawn in light of the claim amendments.

***OBJECTIONS/REJECTIONS MAINTAINED***

The rejection of claims 1-6, 8, 10, and 11 under 35 U.S.C. 103(a) over TSURUDA in view of HONDA is maintained as discussed below.

The rejection of claims 1-8, 10, and 11 under 35 U.S.C. 103(a) over TSURUDA in view of YASUKOCHI is maintained as discussed below.

***Claim Rejections - 35 USC § 103 (Maintained)***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 1-6, 8, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over TSURUDA (WO 01/68061; Published Sep. 20, 2001; Reference AC on IDS dated Aug. 3, 2006; U.S. Patent No. 6,924,410 is used herein as an English language translation) (hereinafter Tsuruda) in view of HONDA (U.S. 5,637,293; Issued Jun. 10, 1997).**

1. Since the WO publication is in Japanese, the U.S. patent to Tsuruda, which is the result of the national stage entry of the international application, is relied upon herein as an English language equivalent for all rejections based on WO 01/68061. Column and line numbers refer to the '410 patent.

2. Tsuruda discloses patches comprising a backing (i.e. a support) and an adhesive base (abstract; col., line 59 to col. 2, line 11). Tsuruda teaches that the adhesive base of the patches may preferably comprise a styrene-isoprene-styrene block copolymer (i.e. a macromolecule having a double bond at least in a principle chain thereof (col. 7, lines 7-14; col. 9, lines 4-5 and 17-26). The amount of the styrene-isoprene-styrene copolymer is preferably 10-50% by mass based on the total amount of the base (col. 7, lines 62-67). Tsuruda also teaches the inclusion of a non-steroidal anti-inflammatory, drug (NSAID), most preferably ketoprofen (col. 5, line 15), in the adhesive base, preferably in an amount of 0.1-30% by mass, more preferably 0.1-16% by mass (col. 2, lines 38-41; col. 5, lines 15-22; col. 7, lines 50-54; Formulations 1, 4, and 7) in the patches of their invention. Furthermore, Tsuruda teaches the use of an ultraviolet (UV) screening agent(s) (e.g., UVA blockers such as benzotriazole derivatives (col. 2, lines 23-24); and UVB blockers such as benzophenone derivatives (col. 2, lines 24-29)), as a

stabilizer, in preferable amounts of 0.01-20% by mass (abstract; col. 2, lines 12-33; col. 3, lines 41-49). Additionally, Tsuruda teaches the use of a variety of benzotriazole derivatives and other known organic UV screening agents such as cinnamic acid derivatives and amino acid-based compounds (col. 2, lines 20-29; col. 2, line 46 to col. 3, line 35).

3. Thus, the only difference between Tsuruda and the instant claims is that Tsuruda does not teach the UV blocker in the adhesive base. However, Tsuruda clearly establishes that incorporating the UV absorbent into the base was common practice in the art at the time of the invention. Tsuruda states, "the means for keeping the stability of a medicine in patches has generally been to incorporate an ultraviolet absorbent into the base" (col. 1, lines 39-41). Thus, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to incorporate the UV blocker in the adhesive base as was common in the art. Based on the disclosure of Tsuruda as a whole, the artisan would readily envision doing so, particularly in light of the related art.

4. For instance, Honda discloses topical preparations for drug delivery useful as, *inter alia*, cataplasms and plasters comprising UV blocking agents (abstract; col. 4, lines 29-32). The UV blocking agents of Honda are incorporated into the epidermal preparation and thus contact the skin (i.e. they are not in a backing). In light of these teachings, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to place the UV blocking agent(s) taught by Tsuruda in the adhesive base as was well-known in the art at the time of the invention. Doing so amounts to routine rearrangement of parts, to provide a predictable result.

Furthermore, one would be motivated to include the UV blocking agent in the base as opposed to the backing to avoid the potential of unwanted removal of the UV blocker from the backing by normal wear and abrasion. Claims 1-4, 6 are rendered obvious over Tsuruda and Honda.

5. The UV blocking agents taught by Honda include both dibenzoylmethane derivatives (col. 2, line 60) and benzotriazole derivatives (col. 2, lines 61-62). In particular, Honda teaches that either 4-*tert*-butyl-4'-methoxydibenzoylmethane (col. 2, line 61) or 2-(2-hydroxy-5-methylphenyl)benzotriazole (i.e. 2-(2'-hydroxy-5'-methylphenyl)benzotriazole), which is taught as an acceptable benzotriazole derivative by Tsuruda (Example 1) are acceptable UV blockers in these formulations. Thus, it is clear from the teachings of Honda that 4-*tert*-butyl-4'-methoxydibenzoylmethane and 2-(2'-hydroxy-5'-methylphenyl)benzotriazole are expected to function in the same way.

6. Since Tsuruda teach the use of 2-(2'-hydroxy-5'-methylphenyl)benzotriazole as a UVA blocker, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to use 4-*tert*-butyl-4'-methoxydibenzoylmethane as a UV blocker in the patches of Tsuruda as both Tsuruda and Honda are directed to the same problem of blocking UV light in topical formulations. Because both compounds have the same function, the artisan would have had a high expectation of obtaining the predictable results of blocking UV light in the topical composition with the 4-*tert*-butyl-4'-methoxydibenzoylmethane. Claim 5 is rendered obvious over Tsuruda and Honda.

7. Tsuruda teaches that the adhesive bases of the patches preferably comprise tackifiers such as hydrogenated rosin esters, petroleum resins, and polyterpene resins

(i.e. a terpene resin) (col. 7, lines 21-24). Tsuruda teaches the addition of tackifiers in an amount of 10-40% by mass relative to the total amount of the adhesive base (col. 9, lines 40-45). Tsuruda teaches embodiments wherein the patches further contain zinc oxide (Example 10, wherein Formulation 6 comprises a styrene-isoprene-styrene block copolymer and a NSAID), reading on instant claim 11. Thus, claims 8, 10, and 11 are rendered obvious over Tsuruda and Honda.

A reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill in the art might reasonably infer from the teachings. (*In re Opprecht* 12 USPQ 2d 1235, 1236 (Fed Cir. 1989); *In re Bode* 193 USPQ 12 (CCPA) 1976). In light of the forgoing discussion, the examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a). From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, in the absence of evidence to the contrary, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references.

### ***Response to Arguments***

Applicants' arguments have been fully considered but are not persuasive. Applicants argue that neither Tsuruda nor Honda teaches addition of a UV blocker to an adhesive base.

While it is acknowledged that Tsuruda is drawn specifically to a patch having a UV blocker on the backing layer, not the adhesive base, Tsuruda clearly states that it



was known in the art to incorporate an ultraviolet absorbent into the base (col. 1, lines 39-41). Furthermore, the preparation of Honda is intended to be applied to the skin, and has an adhesive quality (See Table 1 and Experiment 2). Thus, Honda teaches incorporating a UV blocker into an adhesive base. While the disclosure of Tsuruda alone would be sufficient to guide one to place the UV blocker in the adhesive base (because it establishes that UV blockers in the adhesive base were generally used in the art at the time of the invention), in combination with Honda, it would have been obvious to do so.

**Claims 1-8, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuruda in view of YASUKOCHI (U.S. 2005/0053646; Filed Jan. 24, 2003).**

8. The teachings of Tsuruda are presented *supra*. Tsuruda discloses that it was common practice to incorporate a UV absorbent into the base of a patch (col. 1, lines 39-41), but does not explicitly embody the use of UV blocking agents in the adhesive base *per se*.

9. Yasukochi discloses patches comprising pressure sensitive adhesives (abstract). Yasukochi teaches that the adhesives of these patches may contain a variety of additives including UV-absorbing agents (paragraph [0048]). Yasukochi teaches that these UV-absorbing agents can be used in amounts of 15 wt % or less, preferably 10 wt % or less relative to the total weight of the adhesive composition (paragraph [0048]).

10. It is noted that inclusion of the UV screening agent in either the backing or the adhesive base of the patch would have the same stabilizing effect on both the

pharmaceutical compound and the rubber-system macromolecules in the adhesive base. Furthermore, adhesive bases comprising UV absorbing agents were known in the art at the time of the invention. Thus, placing the UV blocker in the adhesive base would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention based on the teachings of Tsuruda and Yasukochi. The artisan would have had a high expectation for obtaining the predictable result of preventing UV damage to the skin, pharmaceutical compound, and/or adhesive by including the UV-blocking compound in the adhesive base in an amount of 10% or less. Claims 1-8, 10, and 11 are rendered obvious over Tsuruda and Yasukochi.

A reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill in the art might reasonably infer from the teachings. (*In re Opprecht* 12 USPQ 2d 1235, 1236 (Fed Cir. 1989); *In re Bode* 193 USPQ 12 (CCPA) 1976). In light of the forgoing discussion, the examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a). From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, in the absence of evidence to the contrary, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references.

#### ***Response to Arguments***

Applicants' arguments have been fully considered but are not persuasive. Applicants argue that the combined teachings of Tsuruda and Yasukochi would not

have provided one with a reasonable expectation of success since the results would not have been predictable.

It is noted that Tsuruda *does* suggest placing the UV blocker in the adhesive base because Tsuruda states that such was commonplace in the art (col. 1, lines 39-41). It is acknowledged that Tsuruda goes on to state that, "there has remained a problem to be worried about as to safety and the like due to said absorbent's direct contact with skin or absorption into the skin." This statement does not nullify the fact that Tsuruda establishes that the use of UV absorbents in the adhesive bases of patches was well-known in the art, and that patches comprising UV absorbents in the adhesive base had been used *successfully* for many years (e.g. see Yasukochi). Furthermore, the MPEP states "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." *In re Gurley*, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994). See MPEP § 2123.

Regarding applicants' argument that the development of patch preparations is unpredictable, the MPEP states that, "Obviousness does not require absolute predictability, however, at least some degree of predictability is required. Evidence showing there was no reasonable expectation of success may support a conclusion of nonobviousness." See MPEP § 2143.02. In this case, Tsuruda establishes that one would have had a reasonable expectation of success because Tsuruda states that incorporating UV absorbents into the bases of patches was known generally in the art. Thus, while some routine experimentation may be required for an artisan to obtain the

optimal working concentration(s) of the components, such optimization would have been within the skill of the artisan and one would have had a reasonable expectation of obtaining a functional patch comprising the UV blockers in the base with only routine experimentation. It is further noted, that the "evidence" provided (regarding the optimization of Honda and Yasukochi) does not demonstrate in any way that there would be unpredictability in combining a UV blocker with the adhesives in Tsuruda's composition. Moreover, the newly applied art cited below (see publication '819 in New Grounds of Rejection) strongly suggests that the composition of claim 1 would be perfectly acceptable, and thus predictable.

Applicants are reminded that Tsuruda teaches all of the instant limitations of claim 1 except for the *placement* of the UV blocker. Thus, the only teaching required of Yasukochi is the explicit incorporation of a UV blocker into an adhesive base, which is provided. At a minimum, the combination of Tsuruda and Yasukochi indicates that placement of the UV blocker in the adhesive base is 'obvious to try'. In the case of Tsuruda's invention, there are only two choices (i.e. a finite number of identified, predictable solutions) for placement of the UV blocker: 1) on the backing, or 2) in the adhesive base), both of which would result in the same stabilization of the components of the base composition. Applicants' statements regarding the optimal ranges for the components recited in claim 1 (see the paragraph bridging pages 12 and 13 of the response) are noted. However, the instant specification also states that the amount of UVA/UVB blocker and NSAID is not particularly limited (paragraphs [0035] and [0038]). Thus, it is clear that, while routine optimization of these amounts may be desirable, a

*functional* patch can be obtained with these components outside of the claimed ranges.

### **NEW GROUNDS OF REJECTION**

New grounds of rejections for claims 1-11 are set forth below.

**Claims 1-4 and 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 2003/0109819 (Filed Dec. 15, 2000) (hereinafter '819) in view of TATEISHI (WO 03/037393; Published Aug. 5, 2003; U.S. 2005/0042269 is used herein as an English language translation).**

Since the WO publication is in Japanese, the U.S. patent application to Tateishi, which is the result of the national stage entry of the international application, is relied upon herein as an English language equivalent for all rejections based on WO 03/037393. Paragraph numbers refer to the '393 application.

11. '819 discloses a patch comprising a styrene-isoprene-styrene block copolymer in an amount of 10-50% by mass, tackifier, and drug (abstract; paragraph [0015]). The patches comprise a support (paragraphs [0027]-[0029]; Examples 2 and 5) and an adhesive base (paragraphs [0008], [0010], and [0021]; claim 1). NSAIDs may be present in amounts from 0.001 to 30% by mass (paragraph [0026]) and ketoprofen is exemplified at a level of 4% (Example 2). '819 teaches blending a UV-ray absorbent such as benzophenone or benzotriazole derivatives, into the composition (i.e. the adhesive base) as necessary (paragraphs [0014] and [0031]). The tackifier is a rosin ester, hydrogenated rosin ester, maleic acid modified rosin ester, terpene, or petroleum

resin and one or more of these may be blended, preferably in an amount from 10-40% by mass (paragraph [0024]). Thus, the only difference between '819 and instant claim 1 is that '819 does not disclose the *percentage* of UV absorbent useful in the invention.

12. It is noted that it is well within the purview of the ordinary artisan to optimize the concentration of a result-effective component (such as the UV absorbent of '819) with no more than routine experimentation. Nonetheless, Tateishi discloses patches having UV absorbers incorporated in the adhesive base layer of the patch and teaches that these components are suitably added in the range of not more than 10% wt % (paragraphs [0043] and [0044]). Thus, the artisan would have been guided by the art to use a UV absorber in this range. Claims 1-4 and 6-10 are rendered obvious over '819 and Tateishi.

13. Both '819 (paragraph [0031]; Examples 5 and 6) and Tateishi (paragraph [0043]) teach the use of zinc oxide, rendering claim 11 obvious.

A reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill in the art might reasonably infer from the teachings. (*In re Opprecht* 12 USPQ 2d 1235, 1236 (Fed Cir. 1989); *In re Bode* 193 USPQ 12 (CCPA) 1976). In light of the forgoing discussion, the examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a). From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, in the absence of evidence to the contrary, the invention

as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references.

**Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 2003/0109819 ('819) in view of Tateishi as applied to claims 1-4 and 6-11 above, and further in view of Honda.**

14. The teachings of '819 and Tateishi are presented *supra*. '819 teaches the use of 2-(2-hydroxy-5-methylphenyl) benzotriazole, but not the related methoxy derivative. However, the use of related benzotriazole derivatives would have been obvious to an ordinary artisan.

15. For example, Honda discloses the use of both 4-tert-butyl-4'-methoxydibenzoylmethane (instantly claimed) and benzotriazole derivatives such as 2-(2-hydroxy-5-methylphenyl)benzotriazole as taught by Tateishi. Thus, the art establishes these compounds as functional equivalents and their substitution for one another is *prima facie* obvious. Claim 5 is rendered obvious over '819, Tateishi, and Honda.

A reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill in the art might reasonably infer from the teachings. (*In re Opprecht* 12 USPQ 2d 1235, 1236 (Fed Cir. 1989); *In re Bode* 193 USPQ 12 (CCPA) 1976). In light of the forgoing discussion, the examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a). From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the

claimed invention. Therefore, in the absence of evidence to the contrary, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references.

### ***Summary/Conclusion***

Claims 1-11 are rejected.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin S. Orwig whose telephone number is (571)270-5869. The examiner can normally be reached Monday-Friday 7:00 am-4:00 pm (with alternate Fridays off). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharmila Landau can be reached Monday-Friday 8:00 am-



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5:00 pm at (571)272-0614. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KSO

/David J Blanchard/  
Primary Examiner, Art Unit 1643